AMENDMENT TO THE CLAIMS

1. (Currently Amended) A computer readable storage medium having instructions, which when performed by a computing device, operate as a language processing system having a text analyzer, the text analyzer configured to receive and analyze input text by accessing a lexicon stored on the computer readable storage medium and provide an output in accordance with accessing information from the ~~lexicon, ,~~lexicon, the lexicon comprising a plurality of entries, each entry corresponding to a word entered in the lexicon, wherein each entry comprises:

> a first field comprising spelling information for an entered word;
>
> a second field comprising part of speech information associated with the entered word; and
>
> a third field comprising lemma delta information associated with the entered word, wherein the lemma delta information comprises transformation information associated with the entered word, the transformation information comprising an op code and an argument value, wherein the op code is indicative of an operation to perform upon the entered word based on the argument value in order to convert the entered word into a second word.

2. (Currently Amended) A computer readable storage medium having instructions, which when performed by a computing device, operate as a language processing system having a text analyzer, the text analyzer configured to receive and analyze input text by accessing a lexicon stored on the computer readable storage medium and provide an output in accordance with accessing information from the lexicon,~~a lexicon for storing word information and adapted for use by a language processing system,~~

the lexicon comprising a plurality of entries, each entry corresponding to a word entered in the lexicon, wherein each entry comprises:

a first field comprising spelling information for an entered word;

a second field comprising part of speech information associated with the entered word; and

a third field comprising lemma delta information associated with the entered word;

a fourth field comprising ~~descriptive~~ description information associated with the entered word; and

a fifth field comprising static segmentation mask information associated with the entered word.

3. (previously presented) The computer readable storage medium of claim 1, wherein the spelling information comprises an identification value corresponding to the entered word.

4. (previously presented) The computer readable storage medium of claim 1, wherein the first field further comprises dynamic segmentation information associated with the entered word.

5. (previously presented) The computer readable storage medium of claim 4, wherein the dynamic segmentation information comprises information for determining whether the entered word can be mapped to at least two separate lexical entries to recognize a valid compound term in a selected language.

6. (previously presented) The computer readable storage medium of claim 4, wherein the first field comprises up to 4 bytes of storage space.

7. (Cancelled)

8. (previously presented) The computer readable storage medium of claim 1, wherein the part of speech information comprises a plurality of parts of speech associated with the entered word.

9. (previously presented) The computer readable storage medium of claim 8, wherein the part of speech information comprises up to four parts of speech, wherein each part of speech occupies up to 1 byte of storage space.

10. (previously presented) The computer readable storage medium of claim 8, and further comprising an intermediate indexes table accessible by the language processing system, the intermediate indexes table comprising probability information for each of the parts of speech associated with the entered word.

11. (cancelled)

12. (previously presented) The computer readable storage medium of claim 1, wherein the second word is a lemma corresponding to the entered word.

13. (cancelled)

14. (previously presented) The computer readable storage medium of claim 1 , wherein the transformation information comprises up to four op codes and corresponding argument values.

15. (previously presented) The computer readable storage medium of claim 2, wherein the description information comprises up to 4 bytes of information.

16. (previously presented)   The computer readable storage medium of claim 2, wherein the description information comprises named entity information.

17. (previously presented)   The computer readable storage medium of claim 16, wherein the named entity comprises a proper pronoun.

18. (previously presented)   The computer readable storage medium of claim 2, wherein the description information comprises information for at least one of person, tense, number, and gender associated with the entered word.

19. (previously presented)   The computer readable storage medium of claim 2, wherein the static segmentation mask information comprises at least one constituent word length of the entered word, the entered word being a compound term of two or more constituent words.

20. (cancelled)

21. (previously presented)   The computer readable storage medium of claim 2, wherein the language processing system comprises an expansive stemming system.

22. (previously presented)   The computer readable storage medium of claim 21, wherein the lexicon comprises data adapted for the expansive stemming system.

23. (previously presented)   The computer readable storage medium of claim 2, wherein the lexicon comprises data adapted for a spell checker.

24. (previously presented) The computer readable storage medium of claim 2, wherein the lexicon comprises data adapted for a grammar checker.

25. (previously presented) The computer readable storage medium of claim 2, wherein the lexicon comprises data adapted for a speech recognition system.

26. (previously presented) The computer readable storage medium of claim 2, wherein the lexicon comprises data adapted for a handwriting recognition system.

27. (previously presented) The computer readable storage medium of claim 2, wherein the lexicon comprises data adapted for a machine translation system.

28. (previously presented) A computer readable storage medium having instructions, which when performed by a computing device, operate as a language processing system having a text analyzer, the text analyzer configured to receive and analyze input text by accessing a lexicon stored on the computer readable storage medium and provide an output in accordance with accessing information from the lexicon, the lexicon comprising information for entered words, wherein for each entered word, corresponding word information is stored in data fields, the data fields comprising:

    a spelling and dynamic segmentation field related to the entered word;

    a part of speech field related to the entered word;

    a lemma delta field related to the entered word;

    a description field for the entered word; and

    a static segmentation mask field for the entered word.

29. (previously presented) The computer readable storage medium of claim 28, wherein each field occupies up to 4 bytes of storage space.

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (previously presented) A method of constructing a lexicon comprising information about words, for each word, the method comprising steps of:
 storing spelling and dynamic segmentation information;
 storing part of speech information;
 storing lemma delta information;
 storing description information for each word; and
 storing static segmentation mask information for words that
  are compound terms.

37. (original) The method of claim 36, and further comprising storing information in a intermediate indexes table for some words in the lexicon.

38. (original) The method of claim 37, wherein storing information comprises storing lemma delta information for the some words.

39. (original) The method of claim 37, wherein storing information comprises storing probability information corresponding to parts of speech information for the some words.

40. (original) A method of updating a lexicon, the method comprising the steps of claim 36, and further comprising:
    selecting new words not currently in the lexicon and
    storing information corresponding to the selected words to
        update the lexicon.

41. (previously presented) The computer readable storage medium of claim 2, wherein the first field further comprises dynamic segmentation information associated with the entered word.

42. (previously presented) The computer readable storage medium of claim 41, wherein the dynamic segmentation information comprises information for determining whether the entered word can be mapped to at least two separate lexical entries to recognize a valid compound term in a selected language.

43. (previously presented) The computer readable storage medium of claim 41, wherein the first field comprises up to 4 bytes of storage space.

44. (previously presented) The computer readable storage medium of claim 2, wherein the part of speech information comprises a plurality of parts of speech associated with the entered word.

45. (previously presented) The computer readable storage medium of claim 44, wherein the part of speech information comprises up to four parts of speech, wherein each part of speech occupies up to 1 byte of storage space.

46. (previously presented) The computer readable storage medium of claim 44, and further comprising an intermediate indexes table accessible by the language processing system, the intermediate indexes table comprising probability information for each of the parts of speech associated with the entered word.